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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,153	10/01/2002	Michael Sasges	13202.00376	9282
27160	7590	03/02/2004	EXAMINER	
PATENT ADMINISTRATOR KATTEN MUCHIN ZAVIS ROSENMAN 525 WEST MONROE STREET SUITE 1600 CHICAGO, IL 60661-3693			LUU, THANH X	
		ART UNIT		PAPER NUMBER
		2878		
DATE MAILED: 03/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/070,153	SASGES ET AL.
	Examiner	Art Unit
	Thanh X Luu	2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-41 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \*    c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>032002</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "156" has been used to designate both a housing and reflective material. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the frame having a first support member must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 6, 7 and 10, are rejected under 35 U.S.C. 102(b) as being anticipated by Savicki (U.S. Patent 5,359,189).

Regarding claims 1-3, 6, 7 and 10, Savicki discloses (see Figures) an optical radiation sensor device for detecting radiation in a radiation field, comprising: a radiation collector (103) for receiving radiation from a predefined arc around the collector within the field and redirecting the received radiation along a predefined pathway; and a sensor element (105) capable of detecting and responding to incident radiation along the pathway. Savicki further discloses (see Figures) the arc comprises a substantially 360 degree arc (around the detector) or at least one arc less than 360 degrees (a 180 degree arc) or a convex shape which refracts and reflects the incident radiation or the radiation collector is directly mounted to the sensor element or the radiation collector has a generally circular cross section.

6. Claims 1, 3-5, 8 and 9, are rejected under 35 U.S.C. 102(b) as being anticipated by Armstrong et al. (U.S. Patent 5,227,632).

Regarding claims 1, 3-5, 8 and 9, Armstrong et al. disclose (see Figures) an optical radiation sensor device for detecting radiation in a radiation field, comprising: a radiation collector (34) for receiving radiation from a predefined arc around the collector within the field and redirecting the received radiation along a predefined pathway; and a sensor element (15 or 17, or 15-17) capable of detecting and responding to incident

radiation along the pathway. Armstrong et al. further disclose (see Figures) the arc comprises at least one arc less than 360 degrees or comprises two or more independent arcs less than 360 degrees or the collector comprises a concave shape which reflects the incident radiation or the radiation collector is remote from the sensor element or the radiation collector has a polygonal cross-section (square or rectangular).

7. Claims 1-4, 6, 8, 10-15, 17, 19, 21-25, 27, 29, 31-35, 37, 39 and 41, are rejected under 35 U.S.C. 102(b) as being anticipated by Ellner (U.S. Patent 4,103,167).

Regarding claims 1-4, 6, 8, 10-15, 17, 19, 21-25, 27, 29, 31-35, 37, 39 and 41, Ellner discloses (see Figures) an optical radiation sensor device for detecting radiation in a radiation field, comprising: a radiation collector (54) for receiving radiation from a predefined arc around the collector within the field and redirecting the received radiation along a predefined pathway; and a sensor element (48) capable of detecting and responding to incident radiation along the pathway. Ellner also discloses (see Figures) at least one radiation source (28) in engagement with a first support member (not shown) or a radiation source assembly comprising a protective sleeve (54) comprising at least one radiation source (28) or a fluid treatment system comprising an array of radiation sources (28). Ellner discloses (see Figures) the arc is substantially 360 degree arc (the collector receives light from all sides), less than 360 degrees (from one side) and the arc comprises two or more independent arcs less than 360 degrees (when detector is rotated or from two sources). Ellner further discloses (see Figures) the collector comprises a distal or remote surface generally concave in shape which refracts

and reflects the incident radiation along the pathway or the collector has a generally circular cross-section.

8. Claims 1, 3, 6-11, 13, 15, 17-22, 24 and 27-31, are rejected under 35 U.S.C. 102(b) as being anticipated by Takemoto (U.S. Patent 5,438,208).

Regarding claims 1, 3, 6-11, 13, 15, 17-22, 24 and 27-31, Takemoto discloses (see Figure 3) an optical radiation sensor device for detecting radiation in a radiation field, comprising: a radiation collector (10) for receiving radiation from a predefined arc around the collector within the field and redirecting the received radiation along a predefined pathway; and a sensor element (6) capable of detecting and responding to incident radiation along the pathway. Takemoto also discloses (see Figure 3) at least one radiation source (5) in engagement with a first support member (substrate) or a radiation source assembly comprising a protective sleeve (housing) comprising at least one radiation source (5). Takemoto discloses (see Figures) the arc is less than 360 degrees (from one side). Takemoto further discloses (see Figures) the collector comprises a distal or remote surface (see Figure 3) or directly mounted to the sensor element (see Figure 6) and the surface is generally convex in shape which reflects and refracts the incident radiation along the pathway or the collector has a generally circular cross-section or a polygonal cross-section.

9. Claims 1, 5, 8-11, 16, 19-22, 26, 29-32, 36 and 38-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Saulnier et al. (U.S. Patent 6,133,552).

Regarding claims 1, 5, 8-11, 16, 19-22, 26, 29-32, 36 and 38-41, Saulnier et al. disclose (see Figures 1 and 11) an optical radiation sensor device for detecting radiation

in a radiation field, comprising: a radiation collector (48/28) for receiving radiation from a predefined arc around the collector within the field and redirecting the received radiation along a predefined pathway; and a sensor element (26) capable of detecting and responding to incident radiation along the pathway. Saulnier et al. further disclose the collector comprises a concave shape which reflects the incident radiation or the radiation collector is remote (see Figure 11) from the sensor element or directly (see Figure 1) mounted to the sensor element (16). Saulnier et al. also disclose (see Figures) a frame having a support member (14, 18) and a radiation source or sources (12) or a protective sleeve (housing) as claimed. The conical or u-shaped collector has a generally circular cross-section. Further, a fluid treatment system is intended use and since Saulnier et al. disclose the same structure, it reads on the invention. Lastly, Saulnier et al. disclose (see Figure 7) a wedge shaped collector (46), which results in a polygonal cross-section.

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-4 and 11-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 and 18-21 of U.S. Patent No. 6,512,234. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present invention are simply broader versions of the '234 patent. For instance, the '234 patent (see claim 1) discloses a radiation collector for receiving radiation from a predefined arc and a sensor element for detecting received radiation from the collector.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is (571) 272-2441. The examiner can normally be reached on Monday-Friday from 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta, can be reached on (571) 272-2444. The fax phone number for the organization where the application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

txl  
February 18, 2004



Thanh X. Luu  
Primary Examiner